

# CMANEVS February 2012

## **CMA PROGRESS AT A GLANCE**

as of January 23, 2012:

Anniston Chemical Activity, Ala.: Anniston Chemical Agent Disposal Facility is preparing to use a pressurized liquid nitrogen system to perform concrete scabbling in the Munitions Demilitarization Building during closure. The system—nitrocision—works by thermal expansion as the liquid nitrogen (at extremely high pressure) penetrates the surface of the concrete to remove potentially agent-contaminated surfaces. The advantages of nitrocision include no additional waste stream, no potential for generating heat or creating a source of ignition, integration of a vacuum to minimize dust generation and material handling, no need to remove walls or enlarge openings for traditional machines; reducing the number of entries which should improve schedule and operating costs and an overall improvement in safety and risk reduction compared to using hydraulic hammers.

Blue Grass Chemical Activity, Ky.: Blue Grass Chemical Activity (BGCA) school and community tours have begun and will run through May. BGCA will host the Eastern Kentucky University Safety Division on Feb. 23 and the Pattie A. Clay Hospital Board of Directors on March 22. BGCA leadership is continuously involved in speakers' bureau events to educate local communities on safe storage and build stronger community relationships. BGCA is now available to view and "like" on Facebook. Please let them hear from you!

Deseret Chemical Depot, Utah: Tooele Chemical Agent Disposal Facility workers completed destruction of the Nation's single-largest stockpile-1.1 million munitions containing more than 13,600 tons of chemical agent—on Jan. 21. During the next two years, secondary waste operations will be completed and the disposal facilities will be decontaminated and dismantled.

Pine Bluff Arsenal, Ark.: Pine Bluff Chemical Agent Disposal Facility (PBCDF) Systems Contractor, Washington Demilitarization Company, completed 2011 without any recordable injuries, lost workday away cases, environmental fines or RCRA non-compliances. The PBCDF workforce also achieved more than 5.6 million man-hours without a lost workday away case in 2011. All of these accomplishments were achieved during closure. Additionally, the laboratory subcontractor, Southwest Research Institute, achieved seven years without any recordable injuries and only one recordable injury during the company's 12-year tenure at PBCDF. The facility is approximately 108 days ahead of the life cycle closure schedule, a significant schedule compression.

Pueblo Chemical Depot, Colo.: Pueblo Chemical Depot (PCD) stores mustardfilled munitions: 105 mm projectiles and cartridges, 155 mm projectiles and 4.2-inch mortar cartridges. A Staff Assistance Visit (SAV) with 13 subject matter experts from CMA visited PCD Jan. 9-13. The SAV will assist the depot workforce with preparations for a Department of the Army Inspector General Chemical Surety Inspection on March 5-9.

Umatilla Chemical Depot, Ore.: Umatilla Chemical Agent Disposal Facility (UMCDF) closure activities continue with workers completing final decontamination of the Deactivation Furnace System and the Automatic Continuous Air Monitoring System survey. Rinsate Collection System (RCS) piping removal is near completion and removal of the RCS tank is pending. The facility continues to await the Oregon Department of Environmental Quality's decision on the site's proposed revisions to the UMCDF Closure Plan and the Closure Analytical Methods Program Management Review, both of which are still in the public comment period. Closure continues with the Base Realignment Closure Commission, allowing the Umatilla Land Reuse Authority to enact Umatilla's land reuse plan which includes space for Oregon National Guard training, a wildlife refuge and commercial development.



Workers move the last two lewisite ton containers into the ATLIC for destruction Jan. 17, 2012. DCD's small stockpile of lewisite blister agent was the only stockpile

## **DCD Stockpile Eliminated**

#### Workers successfully end storage and destruction missions

Jan. 21, 2012, a historic day—was a day for the chemical weapons history books—as workers at Deseret Chemical Depot (DCD) safely completed destruction of the Nation's single-largest chemical weapons stockpile—more than 1.1 million munitions containing more than 13,600 tons of chemical agent.

"The destruction of chemical agents at Deseret Chemical Depot has made the world a safer place, and most definitely a safer place for those in the surrounding community," said DCD Commander Col. Mark Pomeroy. "Reaching this milestone is truly a credit to five generations of exceptional depot workers, the support of this community and the resolve of our Nation to destroy these terrible weapons."

Storage of the DCD stockpile began in 1942 and accounted for 44 percent of the total U.S. stockpile. Not only was the DCD stockpile the Nation's largest, it was also the most diverse—five different chemical agents contained in more than 10 types of munitions. In 1996 the Tooele Chemical Agent Disposal Facility (TOCDF) started its vital mission to safely destroy these weapons.

"Over the 15-year period that TOCDF has been operating, there have been a variety of challenges to overcome associated with the aging stockpile," said TOCDF Site Project Manager Ted Ryba. "Our workers have been up to the challenge. Equipment modifications and process changes have ensured continued safe processing at TOCDE."

As the chemical weapons destruction mission approached the home stretch, two separate projects brought operations to a close. With the combined success of these projects—cutter operations at the TOCDF and the Area 10 Liquid Incinerator (ATLIC)— workers safely completed operations ahead of the April 29, 2012, international treaty deadline.

#### **TOCDF** cutter operations

The final stage of the TOCDF mustard agent munitions campaign involved 333 overpacked 4.2-inch mortars and 155 millimeter. projectiles. While most of the mortars were overpacked during agent sampling operations, the majority of the projectiles were overpacked because they were so badly deteriorated or had leaked in the past and could not be destroyed using the normal disposal process.

The TOCDF disposal process was fine-tuned and modified with reconfigured equipment such as specially-designed cutting equipment to assist with the removal of explosive components. This new campaign began Sept. 29, 2011, and in less than three weeks, workers destroyed what was left of the 4.2-inch mortars.

However, the projectiles presented an additional challenge because some of the projectiles' agent fills had hardened such that the bursters and burster wells were stuck in place. With creative problem solving and careful planning, the projectile campaign was successfully completed on Jan. 18, 2012, bringing TOCDF operations to a close.

#### Area 10 Liquid Incinerator (ATLIC)

Designed to destroy DCD's small stockpile of GA nerve and lewisite blister agents—the only stockpile in the United States—ATLIC operations began Oct. 31, 2011, as the first GA nerve agent-filled ton container was drained. The ATLIC and TOCDF ran in parallel as both facilities worked to destroy DCD's remaining stockpile of chemical weapons.

In less than two weeks, workers safely completed destruction of the four GA nerve agent-filled ton containers—the last of the nerve agent stored at DCD. Workers then focused on the final ATLIC campaign and on Dec. 19, 2011, began destruction of the 10 lewisite ton containers.

Lewisite operations successfully concluded Jan. 21, signifying the end of chemical agent operations at DCD and the end of the Nation's and the world's largest chemical agent stockpile.

"I'm proud of our workers for all their efforts over the years to reach this point—mission completion," said Gary McCloskey, TOCDF general manager. "And we reached this milestone safely, working more than 13.5 million manhours without a lost workday injury. As we move into closure, we will continue to emphasize safety for our workers and the environment."



Larry Gottschalk, Project Manager for the NSCMP, briefs NSCMP's assessment and destruction capabilities for recovered chemical warfare materiel.

## **NSCMP Hosts Capabilities Tour for Canadian Delegation**

The U.S. Army Non-Stockpile Chemical Materiel Project (NSCMP) hosted a technology tour on Jan. 24, 2012, in support of a capabilities briefing and demonstration for 20th Support Command Chemical Biological Radiological Nuclear and high-yield Explosives (CBRNE). Five representatives from Canada specializing in CBRNE emergency response and explosive ordnance disposal travelled to Aberdeen Proving Ground, Md., to learn more about the United States' CBRNE community.

Larry Gottschalk, Project Manager for NSCMP, briefed the delegation on completed and ongoing missions, assessment and destruction capabilities, research and development initiatives and various technologies. During the briefing, delegation members questioned whether NSCMP could

conduct Explosive Destruction System (EDS) operations Outside the Continental United States (OCONUS) and what types of technology improvements NSCMP conducts. Gottschalk explained that the EDS. a transportable system, could respond to OCONUS operations. Additionally, he reviewed NSCMP's research and development program and noted that the majority of improvements are scheduled for testing this year.

Gottschalk walked the visitors through a typical recovery scenario of a suspect recovered chemical warfare materiel item while touring NSCMP's exclusive assessment and treatment technologies. The tour included the Mobile Munitions Assessment System, Single Chemical Agent Identification Sets Access Neutralization System, Mobile Command Post and the EDS.

## **BGCA Employees Tour BGCAPP Demil Facility**

Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Site Project Manager, Jeff Brubaker, hosted the first of three tours for employees of the Blue Grass Chemical Activity (BGCA) Jan. 12.

BGCA employees listened as Brubaker provided a detailed briefing regarding the process in which the chemical weapons stockpile will be destroyed. He also discussed the relationship between both organizations and the significant role each plays in the demilitarization process.

Lt. Col. Steven Basso, BGCA Commander, stated, "It is important for our employees to understand the process and the role they will play as demilitarization gets closer." Lt. Col. Basso also discussed how BGCA will support BGCAPP once the process begins.

The intent is for all BGCA employees to have the opportunity to tour the BGCAPP facility, so two additional tours are scheduled, one this month and one in March.



Site Project Manager Jeff Brubaker explains the dynamics of the concrete and steel in relation to building the facility. He then escorted the group through the facility identifying the area where chemical weapons will be destroyed.



## **UMCDF** Receives full **VPP Status**

Umatilla Chemical Agent Disposal Facility's (UMCDF) systems contractor, Washington Demilitarization Company (WDC), received formal notification from the U.S. Department of Lahor in December 2011 that the Occupational Safety and Health Administration (OSHA) restored WDC to full Voluntary Protection Program (VPP) Star Status. According to OSHA, the VPP recognizes employers and workers in private industry and federal agencies who have implemented effective safety and health management systems and maintained injury and illness rates below the U.S. Bureau of Labor Statistics averages for their respective industries.

The site first achieved VPP status in December 2006 and. at the time, was the second demilitarization site to achieve this status - Anniston Chemical Agent Disposal Facility was the first. UMCDF was placed on one-year conditional participation status following a VPP review in late March 2010.

OSHA then conducted a re-evaluation in June 2011, and determined that WDC had met the requirements for full VPP Star Status. All elements of the site's safety and health management program meet the high quality expected of VPP participants.

### Burn Awareness

Since National Burn Awareness Week is February 5-11, it is a good opportunity to practice fire safety and burn prevention. Fire risk increases during the winter months, and children are inside more, so it is also a good time to brush up on how to treat minor burns appropriately to avoid further complication

Burn prevention:

- When cooking on a stoyeton, use back burners. Pot handles on front burners should be turned toward the back of
- · Place space heaters on a floor that is flat and level do not put space heaters on rugs or carpets
- Keep children and pets away from space heaters and vents that release heat
- · Tuck appliance cords where children cannot reach them

Minor (first-degree) burn treatment:

- · Use cool cloths on burns, and take frequent cool showers or baths
- Apply Aloe vera or hydrocortisone creams to relieve pain or swelling. Sunburn may be treated using Aloe Vera as well. Skin may be itchy when healing and certain lotions may be helpful
- · Minor burns can be painful, over-the-counter non-steroidal anti-inflammatory drugs will provide temporary relief

(Please consult with your doctor before using any medicated lotion or over-the-counter pain reliever.)

Also, remember to seek medical attention for more severe burns. It is better to be safe than sorry, which is why